MACROECONOMIC FORECAST

Spring 2023

Ministry of Finance of the Republic of Bulgaria

The economic activity in EU and on a global scale decelerated in late 2022. In 2023, high inflation and rising interest rates are expected to constrain consumption and investment dynamics in the EU and other advanced economies, as GDP growth is expected to slow down. A gradual improvement in the external economic environment is expected in 2024–2026.

In 2022, Bulgaria's real gross domestic product increased by 3.4%. Growth is forecast to decelerate to 1.8% in 2023 due to a deterioration in external demand and financing conditions, in an environment of rising interest rates. In the remaining years of the forecast period, the increase in confidence among economic agents will strengthen household consumption and private investment. As a result, GDP growth will be between 3–3.3%.

As all containment measures against COVID-19 were uplifted in 2022, the employment growth accelerated to 1.3%. It is expected to slow down to 0.4% in 2023 in line with the lower economic growth in the country as the external environment is assumed to be challenging. The unemployment rate in 2023 is estimated at 4.1%, and it is expected to decrease to 3.8% by the end of the forecast period.

Following the significant increase of 18.4% in 2022, the nominal growth of compensation per employee is projected to decelerate to 11.5% in 2023 in line with the expected slowdown in inflation, the worsened economic activity outlook as well as the lower contribution from the public sector. In 2024, the growth rate of compensation per employee is expected to remain strong, after which will report a more pronounced slowdown.

Inflation in the country has been decelerating since the last quarter of 2022, mostly due to the downward trend in international prices of energy goods and other commodities, which is expected to continue until the end of the forecasting horizon. The annual average HICP inflation is set to decline from 13.0% in 2022 to 8.7% in 2023. In the coming years, inflation will continue to decelerate, with energy prices reporting a decrease. Core inflation components will account the most for the expected increase in the headline rate.

The external position is expected to remain stable throughout the forecast horizon. The current account deficit will show practically no change in 2023, after which it will increase slightly in 2024, driven by the stronger growth of import as compared to export of goods. By the end of the forecast period the current account balance will reach a deficit of about 2% of GDP.

Credit to the private sector grew by 12.7% in 2022 as a result of strong demand for borrowing resources from both corporations and households. Credit growth remained relatively high at the beginning of 2023, but it is expected to slow down by the end of the year in line with the lower economic growth, and the increase in total claims on the private sector will reach 9%. By the end of the forecast period, claims on corporations will remain relatively stable, supported by both the NRRP and accelerating growth in private investment. In turn, claims on households will slow throughout the period. Claims on the private sector at the end of 2026 will increase by 8.2%.

An alternative macroeconomic scenario has also been prepared, taking into account potential risks to the forecast. It envisages weaker external demand and further decline in international commodity prices. As a result of the simulation done and the assumptions used, GDP growth in 2023 and 2024 would be lower than the baseline scenario, after which it would pick up slightly. The level of GDP at constant prices will remain lower than the baseline until the end of the forecast period. Inflation will rise slightly in 2023 as a result of the depreciation of the euro against the dollar but will remain lower than the baseline scenario in 2024–2026. •

1 External environment. Main assumptions

Global economic dynamics in 2022 reflected the ongoing recovery from the crisis caused by the COVID-19 pandemic, along with new shocks from the Russian Federation's war in Ukraine and the energy problems in Europe. Economic growth was strong in the EU and globally in the first half of the year, and slowed down at the end of 2022. The external environment is expected to remain volatile over the forecast period, but the EU economy will be relatively resilient to challenges in the energy sector, and potential disruptions in international trade and/or shortages of basic raw materials will not lead to a substantial blocking of the activity of economic sectors. In 2023, still high inflation and rising interest rates will significantly constrain consumption and investment activity in the EU and other advanced economies, and growth rates will slow. In 2024, economic activity will slightly accelerate, reflecting expectations for a stabilization of the environment. Slowing inflation in 2025, combined with some interest rate cuts by central banks, will support consumption and GDP growth. At the end of the forecast period, the growth rate will be slightly above the long-term average in the EU, and close to it for the world.

According to the World Bank Pink sheets, the international energy prices increased by an average of 60% in dollar terms in 2022, i.e. Brent oil price rose almost 42%. Prices of non-energy commodity went up by 10.6%, with food prices rising by an average of 17.9% over 2021. Since mid-2022, there has been a downward trend in the international prices of both energy and non-energy commodities. Furthermore, in the first two months of 2023, their change in dollar terms compared to the corresponding month of the previous year was negative, down by 17.0% and 8.9%, respectively.

The assumptions for commodity prices are based on the relevant futures, with a cut-off date of 13.03.2023. The average price of Brent crude oil in 2023 is expected to decline by almost 18% to 82.2 USD per barrel. In the following years, it will continue to gradually decrease to $70 in 2026. Natural gas prices for Europe are expected to fall by an average of 61% in dollar terms in 2023 and stabilize at that level in 2024, after which they will report a decline in the subsequent two years. In 2023, the prices of non-energy commodities in dollar terms are projected to go down by an average of 10.6%, and their decline will continue until the end of the forecasting horizon, but at a slower pace.

In 2022, the euro, and correspondingly the Bulgarian lev, depreciated against the US dollar by an average of 11%.

External assumptions: difference from the previous forecast

	Spring forecast 2023				Autumn forecast 2022				Difference from the previous forecast			
	2023	**2024**	**2025**	**2026**	**2023**	**2024**	**2025**	**2026**	**2023**	**2024**	**2025**	**2026**
World real GDP, %	2.8	3.1	3.2	3.2	2.7	3.2	3.4	-	0.2	-0.1	-0.2	-
EU real GDP, %	0.7	1.8	2.1	1.9	0.7	2.1	2.2	-	0.0	-0.3	-0.1	-
USD/EUR exchange rate	1.06	1.06	1.06	1.06	0.98	0.98	0.98	-	0.09	0.09	0.09	-
Oil price, Brent (USD/barrel)	82.2	77.4	73.3	70.0	83.6	76.6	72.7	-	-1.4	0.8	0.6	-
Non-energy commodity prices, in USD, %	-10.6	-2.1	-1.4	-0.6	-14.2	-2.0	-1.0	-	3.6	-0.2	-0.4	-
EURIBOR 3month (%)	3.3	3.3	2.8	2.3	0.8	1.1	1.0	-	2.5	2.2	1.8	-

Source: IMF, Bloomberg, own calculations

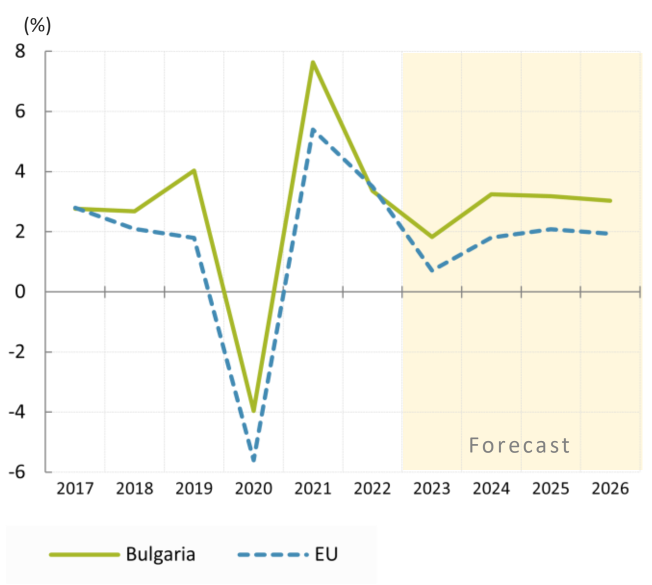
This further strengthened the impact of the increase in international commodity prices, which are quoted in US dollars, on producer and consumer prices in the country. The technical assumption for the USD/EUR[1] exchange rate with daily data as of 13.03.2023 is 1.06 dollars for one euro in 2023, which indicates a nominal appreciation of the single European currency by 1.0% over 2022. In 2024, the average annual exchange rate will decrease by a marginal 0.1%, remaining at the level of 1.06 dollars per euro until the end of the forecasting horizon.

2 Gross Domestic Product

Bulgaria's real GDP growth reached 3.4% in 2022, while being projected at 2.9% in the Autumn forecast. Higher growth came on the back of a steady increase in household consumption. The expectations for a slowdown in consumer spending in the second half of the year in line with the weaker growth of real disposable income, did not come true.

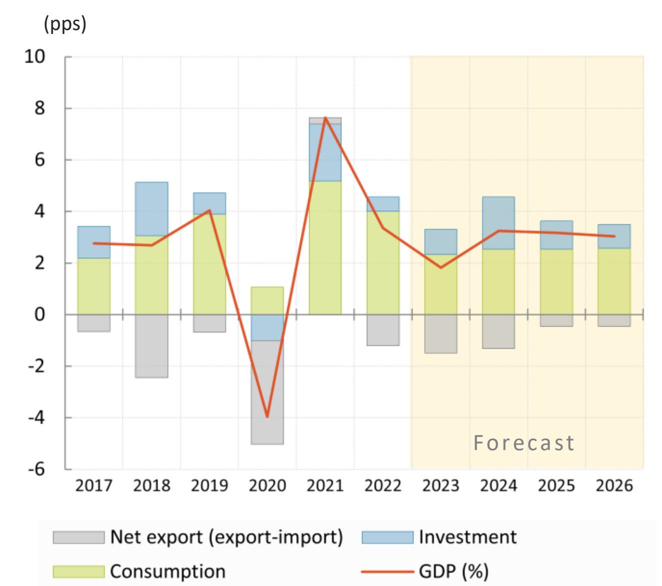
In 2023, GDP growth is expected to decelerate to 1.8%, mainly attributable to consumption, exports and change in inventories. Private consumption growth will be supported by an increase in real disposable income but will slow down as compared to 2022 in line with weaker growth in employment and consumer credit. Government consumption growth is also expected to be lower compared to 2022. At the same time, fixed capital investment will pick up supported by public investment. Private investment will continue to be subdued due to high uncertainty and deteriorating financing conditions. The change in inventories had a positive contribution to GDP growth in the past two years but its contribution is expected to be neutral over the forecast horizon. Export growth will slow down significantly due to weaker external demand. This will lead to a bigger negative contribution of net export to GDP growth.

Real GDP growth, %



Source: Eurostat, EC, MF

GDP growth and contribution by main components



Source: NSI, MF

[1] An average USD/EUR exchange rate is calculated based on data for the last ten business days as of the date of the assumptions and is fixed for the days until the end of the forecasting horizon, implying a neutral impact on the macroeconomic forecast in the period 2024–2026.

GDP growth will accelerate to 3.3% in 2024. Easing inflationary pressures will lead to higher growth in household consumption. The increase in demand will have a positive effect on private investment activity, and the growth of public investment will remain strong. The growth of exports of goods and services will accelerate backed by the improving external environment, thus the negative contribution of net export to GDP growth will shrink compared to 2023.

In 2025–2026, GDP growth is expected to be 3.2% and 3%, respectively. Investment growth is expected to decelerate due to public investment, while private investment growth will accelerate in line with the lower uncertainty and increased demand. Private consumption will grow at a rate close to its long-term average. In line with the dynamics of the external environment, accelerated growth in exports of goods and services is expected in 2025 followed by a slight slowdown in growth at the end of the period. The rate of import growth will remain higher but the negative contribution of net export will shrink.

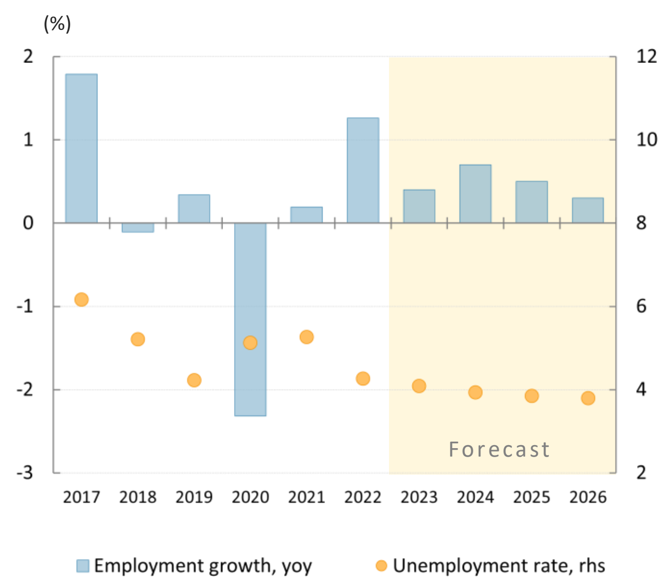
3 Labour Market and Incomes

The expected labour market dynamics in the 2023–2026 is in line with the projected economic growth in the period. After the rapid employment recovery in 2022 due to the uplifting of all containment measures against COVID-19, the annual employment growth is expected to slow down to 0.4%. Behind this would be the overall slowdown in the growth of the Bulgarian economy. Ukrainian immigrants registered for temporary protection in the country are not expected to have a major impact on employment dynamics (by the end of March, the number of Ukrainians remaining in Bulgaria was below 50 000 people, including children).

In 2024, in line with the higher expected growth of the Bulgarian economy, the employment growth is foreseen to accelerate to 0.7%. The number of employed would exceed their level recorded in 2019, the last year before the employment drop due to the COVID-19 crisis. The employment rate (age group 15–64) is expected to be about 73% or by 3 pps above its value in 2019. In 2025 and 2026, the Bulgarian economy will continue to grow at a relatively high rate, but employment growth will slow down. The labour force demand will continue to be high, but the possibilities for an extensive increase in the labour supply will be increasingly exhausted (mainly due to unfavourable demographic processes in the country). The employment rate of the population (15–64) will have reached 75% by the end of the forecast period.

Along with the increase in employment, unemployment in the country is expected to follow a constant downward trend. However, the decrease is expected to be relatively low, as the opportunities for transition from unemployment to employment are increasingly limited without additional measures which would increase the probability of those long-term unemployed to find a new job. In general, these people lack skills and have a degree of education, which is not higher than the elementary one. According to the forecast, the unemployment rate in 2023 will be

Unemployment and participation rates



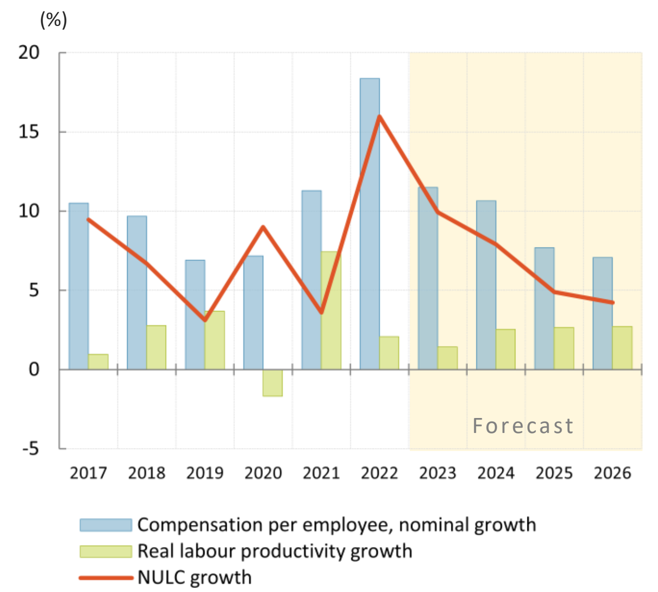
Source: NSI, MF

4.1% (down by 0.2 pps over the previous year), and will decreased to 3.8% by the end of the forecast period. The relatively small decline in the unemployment rate over these three years means that the projected employment growth in the same period is expected to come mainly on the back of people returning to the labour force or people coming from other labour markets (countries).

The compensation per employee growth of 18.4% in 2022 accelerated faster than expected in the fall forecast. Recent developments were driven by the private sector wage dynamics which offset the observed increase in consumer prices.

In 2023, the nominal growth of compensation per employee is projected to decelerate in line with the expected slowdown in inflation dynamics, the worsened economic activity and employment outlook. The nominal growth of compensation per employee is set at 11.5%. The expected slowdown on a year earlier will also reflect the lower contribution coming from the public sector. In 2024, the compensation per employee's growth is expected to remain strong (10.6%) following the expected speed up in real productivity and employees' dynamics. A higher contribution is also expected from the country's minimum wage increase, in accordance with the adopted normative changes for its updating. The nominal growth of compensation per employee will decelerate more pronounced at the end of the forecasting period to 7.7% in 2025 and 7.1% and 2026. In real terms, however, the indicator will accelerate to the rates observed in the period before 2021.

Labour incomes, productivity and unit labour costs (ULC)



Source: NSI, MF

Expectations for the medium-term labour productivity developments remain close to the autumn forecast. A more sizable slowdown in real productivity growth to 1.4% is expected in 2023, after which it will pick up to 2.5–3%. The improved productivity outlook, together with the expected deceleration in compensation per employee growth rates will bring down the nominal unit labor costs dynamics to 4% in 2026. RULC are projected to grow by a moderate annual average rate of 2% throughout the entire forecast period.

4 Inflation

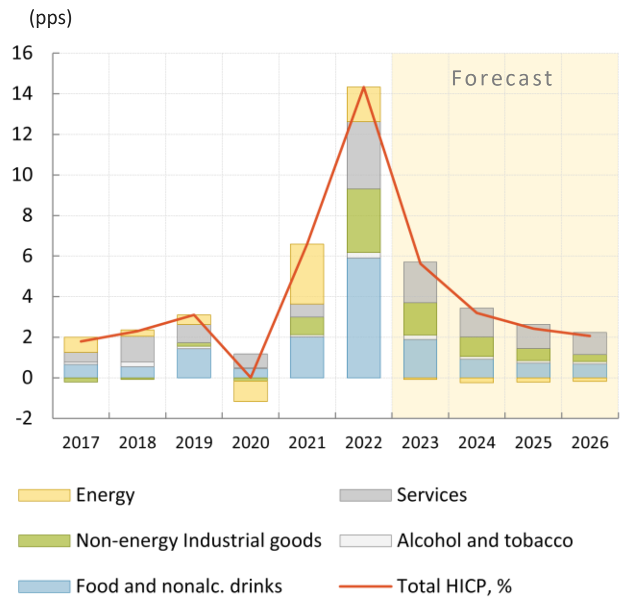
The HICP inflation in the country has been decelerating since the last quarter of 2022. The annual inflation rate reported its highest value at 15.6% yoy in September 2022, after which it narrowed to 13.7% in February 2023. This was mostly due to the downward trend in international prices of energy goods and other commodities, which is expected to continue until the end of the forecasting horizon. Core inflation[2] slightly decelerated to 10.9% yoy in February, in line with a slowdown reported mainly in transport services and durable consumer goods.

[2] Core inflation includes services and non-energy industrial goods.

Inflation at the end of 2023 is expected to decrease to 5.6%, and the annual average rate to be 8.7%. The slow-down will be largely due to a significant reduction in the contributions of food and energy, and the latter is even set to report a slight price drop at the end of the year. The expected decline in international commodity prices throughout the forecasting period will limit inflation in core components, namely services and non-energy industrial goods. However, due to the foreseen increase in domestic demand, as well as in labour costs, both groups will account the most for the projected headline inflation in the country.

In 2024, inflation will continue to slow down, reaching 3.2% at the end of the year, and the annual average rate will be 3.8%. Energy will have a negative contribution to inflation until the end of the forecast horizon. In 2025 and 2026, the annual average inflation will continue to decelerate, to 2.8 and 2.2%, respectively.

End-of-period HICP inflation rate, contributions by main components



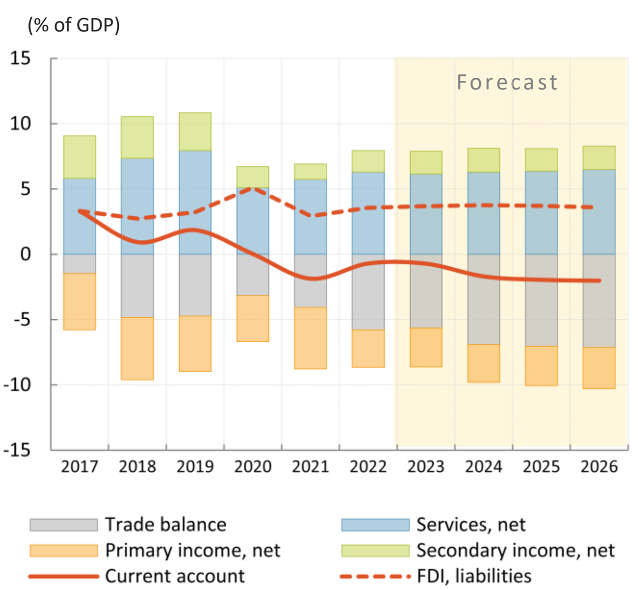
Source: Eurostat, MF

5 Balance of Payments

In 2022, the current account balance improved to a deficit of 0.7% of GDP. The recovery of international travel continued during the year and had a major contribution to the higher surplus on *Services*. At the same time, the overall deficit of the *Income* articles was lower, due to a decrease in the investment income paid to non-residents and higher incoming funds from the EU. A deterioration was recorded only in trade in *goods*, driven by the strong increase in domestic demand. Export maintained high growth rates, despite the unstable external economic environment.

In 2023, the current account deficit is expected to remain around 0.7% of GDP, without any significant changes among its components. Export and import of goods and services will report comparable nominal growth rates, but the pace will be significantly slower than in 2022, due to

Current account and FDI



Source: BNB, NSI, MF

the downward trend in international prices and the expected limited growth in trade volumes. As regards trade in *goods*, the outpacing increase in real import relative to export will be compensated by positive terms of trade. The trade deficit will increase in nominal terms but will diminish as a ratio to GDP due to stronger nominal GDP growth. The expected slowdown in economic activity in Bulgaria's main partners and the downward dynamics in prices will also be reflected in slower growth of travel and transport receipts. The *Services* surplus will decline as a percentage of GDP. The total balance on *goods* and *services* will remain positive, while incomes balance will be negative.

In 2024, the current account deficit is expected to increase to 1.7% of GDP. Import of goods and services will grow faster than export, and trade in goods will account the most for these dynamics. The improvement of the external environment will push up the export of goods, but the accelerating domestic demand will lead to higher import growth and widening of the trade deficit. At the same time, the favourable environment will also support the export of services and hence the increase in the surplus on *Services*. The balance of the income articles will remain almost unchanged, as the main outflows will be related to the repayment of investment income, and the inflows will be funds from operational programs of the EU and the RRP.

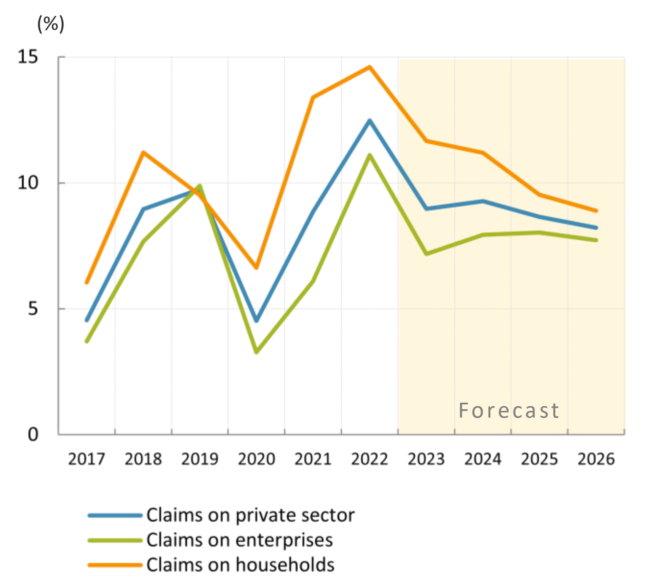
At the end of the forecast period, the current account deficit will gradually rise and reach 2% of GDP in 2026. The nominal growth rates of export and import will be comparable, with higher import of goods and stronger export of services. The payments on investment income will increase the *primary income* deficit and the balance to GDP ratio will deteriorate. Funds from RRF and incoming transfers within the new multiannual financial framework 2021-2027 will support the *secondary income* surplus, but no significant change in the balance as a percentage of GDP is expected.

6 Monetary Sector

The annual growth rate of credit to the private sector followed has been accelerating since the beginning of 2022 until the end of August when it reached 13.9%, being 8.7% at the end of 2021. In the following months of the year, private credit slowed down as interest rates began to gradually increase as a result of the ECB's rising rate cycle, and at the end of December, its annual growth rate reached 12.7%.

Both non-financial corporations and households accounted for the strong demand for credit in 2022. Loans to non-financial corporations (10.1% yoy) were driven mainly by overdrafts, and from the beginning of the third quarter by short-term loans. This development reflected the increased demand for working capital by the enterprises on the background of significantly increased production costs due to higher raw material prices and also

Claims on private sector



Source: BNB, MF

given the difficulties in supply chains. The prevailing environment of low nominal interest rates and rising inflation supported the still high demand for credit from households. Consumer loans increased by 12.4% at the end of 2022. Housing loans grew by 17.8%, with the latter being strengthened further by the double-digit increase in real estate prices.

In the first two months of 2023, credit growth to the private sector remained relatively high (12.4% at the end of February). By the end of the year, its pace will slow down, as this will include both claims on corporations and on households. This will be influenced by the slowdown in economic growth, the expected increase in lending rates as a result of the transmission of the ECB's monetary policy, and, to a lesser extent, the higher levels of the counter-cyclical capital buffers imposed by the BNB. Total claims on the private sector will grow by 9%. Claims on corporations will increase by 7.2%, and their lower growth rate will be at the expense of a significant decrease in the growth of overdrafts and a slower increase in short-term loans. Claims on households will grow by 11.7%.

In 2024, private sector claims will accelerate to 9.3%, driven by higher growth in claims on corporations. It is expected that they will be positively affected by the implementation of the NRRP, as well as by a positive growth of private investments. At the end of 2024, claims on enterprises will grow by 7.9%. Household claims will slow slightly to 11.2%, supported by higher growth in private consumption.

During the period 2025–2026, claims on households will continue to slow and at the end of 2026 will grow by 8.9%. Claims on non-financial enterprises will maintain a relatively stable growth rate until the end of the forecast period, which will then reach 7.7%. Total claims on the private sector will slow down gradually until the end of the forecast period and at the end of 2026, their annual growth will reach 8.2%.

At the end of 2023, the annual growth of the money supply will decrease to 12.4% compared to 13.2% at the end of 2022. In the period 2024–2026, we expect the growth of the money supply to slow down as investment activity in the country increases. At the end of the forecast period, its annual growth will be around 11.7%. •

7 Risks

The global geopolitical situation continues to be surrounded by substantial uncertainty, which implies significant risks to the macroeconomic forecast.

The openness of the Bulgarian economy makes it dependent on the economic dynamics of our main trading partners, especially those from the EU. In this respect, higher-than-expected inflation rates, an accelerated increase in interest rates and, respectively, a decrease in the disposable income of households and/or a limitation of production and investment activity in our trading partners are factors that could limit external demand. This would have a negative effect on export and production in the country.

The ban on the import of Russian crude oil into the EU, which has entered into force, may have a negative impact on the export of oil products from Bulgaria to third countries, although our country currently benefits from a specific derogation.

The risks regarding the inflation forecast are mainly associated with the expected price dynamics of internationally traded commodities and especially energy goods, as well as the increase in labor costs in the economy. These could lead to higher than projected inflation in the medium term.

The deterioration in financing conditions may have a stronger negative effect on investment than expected. The forecast is prepared assuming a zero contribution of the change in inventories in 2023[3] but a significant negative change is possible which, if not offset by another component, would further reduce GDP growth.

Meanwhile, there are also a number of upside risks. In the first quarter of 2023, indicators of the attitudes of economic agents showed a substantial improvement in the assessments and expectations for developments in the euro area and in other major economies. In this regard, our trading partners could report higher than expected growth rates in the current year, which would have a positive impact on exports and economic dynamics in the country.

In the second half of 2022, a significant drop in the export of grain and oilseed crops from Bulgaria was reported. In 2023, more favorable conditions for foreign trade and a better harvest would significantly support the growth of export of goods from this group.

In 2022, household consumption was stable in Bulgaria given the rising inflation. The recorded growth was higher than expected and if this trend continues in 2023 a larger increase in GDP could be observed. In addition, household purchasing power may be higher with lower inflation and slower pass-through from higher euro area interest rates to household credit. Investment activity can also improve if uncertainty is reduced and firms reorient from current expenditures to long-term investment programs.

[3] The forecasting routine assumes a neutral contribution from the change in inventories.

MAIN ECONOMIC INDICATORS	ACTUAL DATA*		PROJECTIONS			
	2021	2022	2023	2024	2025	2026
International Environment						
World real GDP (%)	6.1	3.4	2.8	3.1	3.2	3.2
EU real GDP (%)	5.4	3.5	0.7	1.8	2.1	1.9
USD/EUR exchange rate	1.18	1.05	1.06	1.06	1.06	1.06
Crude oil, Brent (USD, bbl)	70.4	99.8	82.2	77.4	73.3	70.0
Non-energy commodity prices (in USD, %)	32.7	8.7	-10.6	-2.1	-1.4	-0.6
EURIBOR 3month (%)	-0.5	0.3	3.3	3.3	2.8	2.3
Gross Ddomestic Product						
Nominal GDP (mln BGN)	139 012	165 384	184 486	197 566	210 190	222 693
Real GDP growth (%)	7.6	3.4	1.8	3.3	3.2	3.0
Consumption	6.7	5.2	3.0	3.3	3.3	3.3
Gross fixed capital formation	-8.3	-4.3	6.3	12.6	6.5	4.8
Export of goods and services	11.0	8.3	1.7	4.3	4.7	4.3
Import of goods and services	10.9	10.5	3.9	6.4	5.4	5.0
Labour Market and Prices						
Employment growth (SNA, %)	0.2	1.3	0.4	0.7	0.5	0.3
Unemployment rate (LFS, %)	5.3	4.3	4.1	3.9	3.8	3.8
Compensation per employee (%)	11.3	18.4	11.5	10.6	7.7	7.1
GDP deflator (%)	7.1	15.1	9.5	3.7	3.1	2.8
Annual average HICP inflation (%)	2.8	13.0	8.7	3.8	2.8	2.2
Balance of Payments						
Current account (% of GDP)	-1.9	-0.7	-0.7	-1.7	-1.9	-2.0
Trade balance (% of GDP)	-4.1	-5.8	-5.6	-6.9	-7.0	-7.1
Foreign direct investments (% of GDP)	2.9	3.6	3.7	3.8	3.7	3.6
Monetary Sector						
M3 (%)	10.7	13.2	12.4	11.9	12.1	11.7
Claims on enterprises (%)	6.1	11.1	7.2	7.9	8.0	7.7
Claims on households (%)	13.4	14.6	11.7	11.2	9.5	8.9

** The forecast is based on statistica data up to 20 March 2023, unless noted otherwise*

Source: MF, NSI, BNB, IMF, Bloomberg

8 Alternative scenario

More than a year after the beginning of the Russian Federation's war in Ukraine, the international economic environment remains uncertain and difficult to predict. The alternative macroeconomic scenario assumes more unfavorable external demand dynamics and a greater drop in international commodity prices compared to the baseline scenario. The shock to the growth of the European and world economies would materialize in the second half of 2023, and will carry over into 2024. In the last two years of the forecast period, both EU and world will report higher GDP growth rates compared to the baseline scenario, but its level at constant prices will remain lower until the end of the forecast horizon. In the considered scenario, the negative effect on the EU economy is stronger, which implies a certain depreciation of the euro against the dollar. Weaker global demand will also lead to relatively lower international commodity prices until the end of 2026. It is assumed that the ECB will start to gradually decrease the main interest rate in the second half of 2024, as a result of lower economic activity in the EU and a larger drop in international prices. The probability of this downside scenario to materialize is implied by the strong increase in interest rates in 2022. High indebtedness and the rising cost of debt service increase the risk of defaulting on current payments to creditors and worsening financial stability. This would have a negative impact on the real estate market, construction activity and household consumption.

Weaker demand in our main trading partners will reduce Bulgaria's real GDP growth in 2023 and 2024. In the next two years of the forecast period, economic growth will be slightly higher compared to the baseline scenario. Behind these developments in 2025 will be the stronger external demand, which will have a positive effect on the growth of export of goods and services, while higher investments in fixed capital will account the most in 2026. However, GDP at current prices will remain below the baseline projections, partly due to the lower GDP deflator. The weaker growth of companies' revenues from export will have a negative impact on employment and incomes in the country, and hence on consumption. Investments will also be negatively impacted by weaker demand and high uncertainty, especially in real estate and construction. The depreciation of the euro against the dollar in 2023 will raise the prices of imported raw materials and translate into slightly higher inflation compared to the baseline scenario. During the rest of the period, inflation will be lower in the alternative scenario, due to the expected

External assumption of the alternative scenario (difference from the baseline scenario)

	2023	2024	2025	2026
World real GDP (growth rate, pps)	-0.4	-0.6	0.4	0.1
EU real GDP (growth rate, pps)	-0.7	-1.1	0.7	0.1
USD/EUR exchange rate (%)	-4.0%	-2.0%	0.0%	0.0%
Crude oil, Brent (USD, bbl, %)	-2.9%	-8.7%	-2.5%	-2.0%
Metal prices (in USD, %)	-0.5%	-1.0%	-0.5%	-0.5%
Prices of agricultural raw materials (in USD, %)	-0.5%	-6.1%	-0.5%	-0.5%
Food prices (in USD, %)	-2.6%	-3.4%	-1.2%	-1.2%
EURIBOR 3m (pps)	0.0	-0.3	0.0	0.0

Source: own calculations

Main macroeconomic indicators (difference from the baseline scenario)

	2023	2024	2025	2026
Gross Domestic Product				
GDP level current prices [%]	-0.5%	-1.2%	-1.1%	-1.1%
Real GDP growth [pps]	-0.1	-0.5	0.1	0.2
Consumption	0.0	-0.1	0.1	0.0
Gross fixed capital formation	0.5	-1.1	-1.1	1.1
Export of goods and services	-0.7	-1.0	1.0	0.0
Import of goods and services	-0.3	-0.6	0.4	0.0
Labour Market and Prices				
Employment level, (SNA) [%]	0.0%	-0.2%	-0.2%	-0.1%
Unemployment rate, (LFS) [pps]	0.0	0.1	0.1	0.1
Compensation of empoyees [pps]	-0.1%	-0.3%	-0.4%	-0.5%
GDP deflator [pps]	-0.3	-0.2	-0.1	-0.2
Annual average HICP inflation [pps]	0.3	-0.4	-0.3	-0.2
Balance of Payments				
Current account in % of GDP [pps]	-0.6	-0.8	-0.5	-0.6

Source: own calculations

larger decline in international commodity prices. As a result of the deteriorating terms of trade, the GDP deflator will be lower compared to the baseline projections, while the current account deficit will increase, following foreign trade dynamics.

A summary of the expected changes in key macroeconomic indicators, as a result of the changes made in the assumptions, are presented in the following table.

9 Recent forecasts for GDP growth and inflation in Bulgaria by other institutions

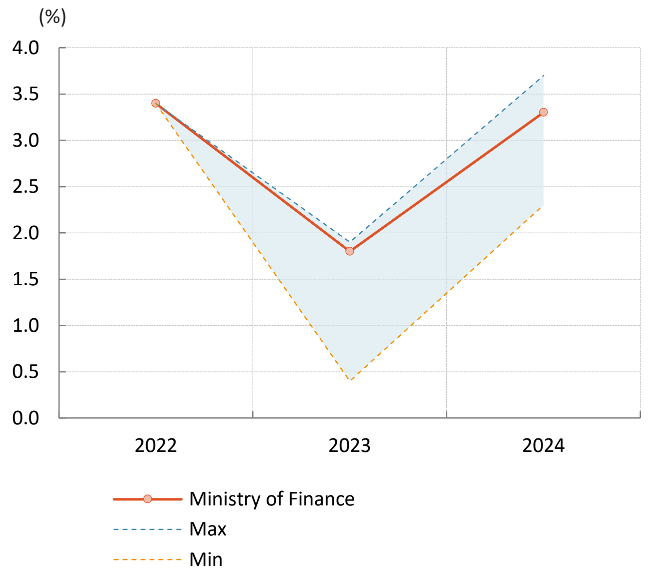
This section summarizes the latest forecasts of various institutions for real GDP growth and annual average inflation rate in Bulgaria. These forecasts are not fully comparable, as they were prepared at different points in time and are based on different methods and assumptions. Information is available for the time of their publication, but not for the time of preparation. A forecast prepared at a later stage has an information advantage.

Real GDP Growth, %

	2022	2023	2024	Publication date
UniCredit Bulbank	3.4	1.3	2.3	30.03.2023
DSK Bank	3.4	1.2	2.3	29.03.2023
UBB Part of KBC Group	3.4	1.5	3.0	17.03.2023
Eurobank	3.8	1.3	2.5	09.03.2023
ING Bank		1.6	3.2	03.03.2023
European Bank for Reconstruction and Development (EBRD)	3.0	1.0	2.6	16.02.2023
European Commission (EC)	3.9	1.4	2.5	13.02.2023
Moody's	2.7	1.4	2.9	03.02.2023
International Monetary Fund (IMF)	3.1	1.2	3.7	30.01.2023
Bulgarian National Bank (BNB)	3.4	0.4	3.2	30.01.2023
The Vienna Institute for International Economic Studies (wiiw)	3.0	1.5	2.5	30.01.2023
World bank (WB)	3.1	1.7	3.3	10.01.2023
Scope Ratings	3.2	1.0	3.0	15.12.2022
Standard & Poor's (S&P)	3.0	0.8	3.5	25.11.2022
Organization for Economic Co-operation and Development (OECD)	2.8	1.7	3.1	22.11.2022
Fitch Ratings	3.5	1.4		18.11.2022
Oesterreichische Nationalbank (OeNB)	3.1	1.9	3.0	28.10.2022
Min	2.7	0.4	2.3	
Max	3.9	1.9	3.7	
Average	**3.2**	**1.3**	**2.9**	
Ministry of Finance	3.4	1.8	3.3	

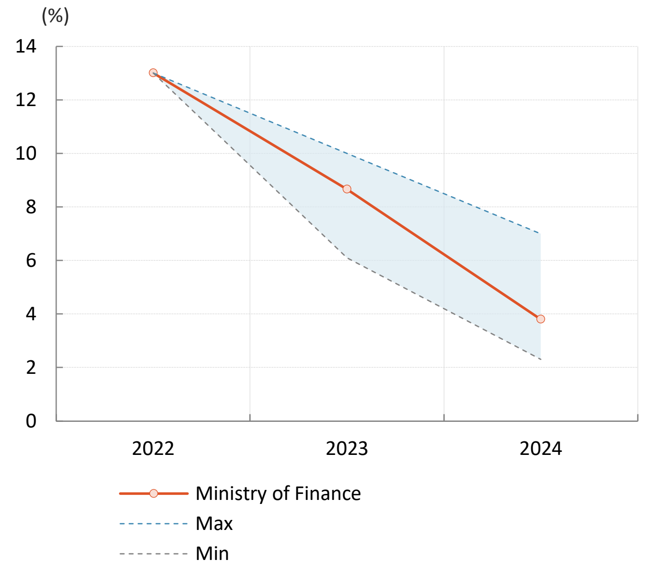
Source: publications of the respective institutions

Range of forecasts for real GDP growth



Source: publications of the respective institutions

Range of forecasts for annual average HICP



Source: publications of the respective institutions

Annual average inflation, %

Harmonised Index of Consumer Prices (HICP)	2022	2023	2024	Publication date
DSK Bank	13.0	6.1	2.3	29.03.2023
UBB Part of KBC Group	13.0	9.5	3.5	17.03.2023
European Commission (EC)	13.0	7.8	4.0	13.02.2023
International Monetary Fund (IMF)	12.9	6.8	2.5	30.01.2023
Bulgarian National Bank (BNB)	13.0	7.0		30.01.2023
The Vienna Institute for International Economic Studies (wiiw)	13.0	10.0	7.0	30.01.2023
Scope Ratings	13.1	7.3	3.5	15.12.2022
Standard & Poor's (S&P)	15.0	9.8	3.7	25.11.2022
Fitch Ratings	13.1	9.2		18.11.2022
Min	12.9	6.1	2.3	
Max	15.0	10.0	7.0	
Average	**13.2**	**8.2**	**3.8**	
Ministry of Finance	13.0	8.7	3.8	
Consumer price index (CPI)				
UniCredit Bulbank	15.3	11.1	5.5	30.03.2023
Eurobank	15.2	8.7	4.1	09.03.2023
ING Bank		11.2	6.6	03.03.2023
Organization for Economic Co-operation and Development (OECD)	14.1	7.5	4.8	22.11.2022
World Bank (WB)	14.4	6.8	3.6	04.10.2022

Source: publications of the respective institutions

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